

Docket No. YOR9-2000-0126-US1

5. A method for generating bids for bidding agents in an auction, the method comprising:

identifying a first bid requesting a quantity in  
10 which an unallocatable portion is present;

setting a price for the number of order bids.

7. The method of claim 5, wherein each bid in the number of order bids is selected from the plurality of bids based on the allocation requirement, upper limit, and a time when each order bid in the number of order  
25 bids was received.

9. The method of claim 5, wherein each bid in the

number of order bids is selected based on the allocation requirement and the number of order bids maximize revenue.

5 10. The method of claim 5, further comprising:

repeating the selecting and setting steps for any remaining portion of the unallocatable portion and any remaining order bids in the plurality of bids.

10 11. The method of claim 5, wherein the price of the number of order bids is less than a price for the first bid.

12. The method of claim 5, wherein the number of order  
15 bids includes a bid accepting a partial allocation of a quantity for the bid.

13. A data processing system comprising:  
a bus system;  
20 a communications unit connected to the bus system;  
a memory connected to the bus system, wherein the memory includes as set of instructions; and  
a processing unit connected to the bus system,  
wherein the processing unit executes the set of  
25 instructions to receive a plurality of bids through the communications unit, sort the plurality of bids by decreasing bid amount to form a sorted set of bids in which each bid includes a quantity and the plurality of bids includes order bids, identify a first bid within the  
30 sorted set of bids having a quantity in which an unallocatable portion is present, select a number of order bids from the plurality of bids in which number of

order bids are higher in the sorted set of bids than the first bid and have an allocation requirement less than the unallocatable portion of the of the first bid, set a price for the number of order bids.

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14. The data processing system of claim 13, wherein the bus system is a single bus.

15. The data processing system of claim 13, wherein the  
10 bus system includes a primary bus and a secondary bus.

16. The data processing system of claim 13, wherein the processing unit includes a plurality of processors.

15 17. The data processing system of claim 13, wherein the  
communications unit is one of a modem and Ethernet  
adapter.

18. A data processing system for generating bids for an  
20 auction, the data processing system comprising:  
    identifying means for identifying a final  
equilibrium position for a set of bidding agents; and  
    submitting means for submitting a bid for each of  
the bidding agents based on the final equilibrium.

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19. The data processing system of claim 18, wherein each of the bidding agents in the set of bidding agents includes an upper limit.

20. The data processing system of claim 18, wherein the identifying means comprises:  
     sorting means for sorting a plurality of bids by

decreasing bid amount to form a sorted set of bids,  
wherein bids for the set of bidding agents are sorted  
using upper limits for the bids for the set of bidding  
agents;

5 identifying means for identifying a first bid from  
the plurality of bids in which an unallocatable portion  
of a requested quantity is present;

selecting means for selecting a number of bids from  
the plurality of bids, wherein the number of bids are  
10 higher in the sorted set of bids than the first bid and  
wherein the number of bids have an allocation requirement  
less than the unallocatable portion of the of the first  
bid; and

setting means for setting a price for the number of  
15 bids.

21. The data processing system of claim 20, wherein the  
sorting means, identifying means, selecting means, and  
setting means are repeated for unallocated items,  
20 remaining bids, and remaining unpriced order bids.

22. A data processing system for generating bids for  
bidding agents in an auction, the data processing system  
comprising:

25 sorting means for sorting a plurality of bids by  
decreasing bid amount to form a sorted set of bids,  
wherein each bid includes a quantity and wherein the  
plurality of bids includes order bids;

identifying means for identifying a first bid  
30 requesting a quantity in which an unallocatable portion  
is present;

selecting means for selecting a number of order bids

from the plurality of bids, wherein the number of order bids are higher in the sorted set of bids than the first bid and have an allocation requirement less than the unallocatable portion of the of the first bid; and

5        setting means for setting a price for the number of order bids.

23. The data processing system of claim 22, wherein the number of order bids is a single order bid.

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24. The data processing system of claim 22, wherein each bid in the number of order bids is selected from the plurality of bids based on the allocation requirement, upper limit, and a time when each order bid in the number  
15 of order bids was received.

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25. The data processing system of claim 22, wherein each order bid in the number of order bids is selected from the plurality of bids based on the allocation requirement and an upper limit.

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26. The data processing system of claim 22, wherein each bid in the number of order bids is selected based on the allocation requirement and the number of order bids  
25 maximize revenue.

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27. The data processing system of claim 22 further comprising:

repeating means for repeating initiation of the  
30 selecting means and setting means for any remaining portion of the unallocatable portion and any remaining order bids in the plurality of bids.

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first instructions for identifying a final  
equilibrium position for a set of bidding agents; and  
15 second instructions for submitting a bid for each of  
the bidding agents based on the final equilibrium.

first instructions for sorting a plurality of bids by decreasing bid amount to form a sorted set of bids, wherein each bid includes a quantity and wherein the plurality of bids includes order bids;

25        second instructions for identifying a first bid requesting a quantity in which an unallocatable portion is present;

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fourth instructions for setting a price for the  
number of order bids.

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